U.S. Application No.: 10/623,949
AMENDMENT A

Attorney Docket: 3827.116

**IN THE SPECIFICATION**

Please amend Paragraphs [00011], [00013], [00014] and [00015] of the application as filed as follows:

[00011] The tool head shown in the figure is designed for finish- processing of valve seat rings and tappet guide bores in cylinder heads for internal combustion engines. The tool head **10** is comprised essentially of a base body **12**, a tool shank **14** projecting axially beyond the base body **12** and couplable with a not shown, motor driveable, rotating machine spindle of a machine tool, three short clamp holders **16, 16', 16"** provided spaced apart from each other about the circumference of the base body **12**, which respectively exhibit one insert receptacle **18, 18', 18"** for receiving an indexable cutting insert **20, 20', 20"** and having a centrally located reamer **22** projecting beyond the surface. The reamer **22** is designed for processing a tappet ~~tapped~~ guide bore **24** indicated in Fig. 3a, b and c with a dash-and-dot line for a cylinder head **26** of which a segment is indicated with diagonal line shading. For face milling the valve seat ring **28** of the cylinder head **26** there is used the indexable cutting insert **20** provided in blade receptacle **18** of the short clamp holder **16**. The two further indexable cutting inserts **20'** and **20"** are for production of the inlet protecting bevel **30** and the outlet protecting bevel **32** bordering the valve seat **28**. The reaming of the tappet guide bore **24** and the fine machining of the valve seat ring **28** and the protective bevels **30, 32** occurs for reasons of centering precision in the one and the same machining step of the workpiece **10**. Accordingly, the indexable cutting inserts **20, 20' 20"** exhibit various adjustment angles in the associated blade receptacles **18, 18' 18"** on their active blade edges **34** in conformance to the individual angles to be machined.

[00013] A further feature of the invention is comprised therein, that the active main cutting edge or blade edge **34** in the shown embodiment is subdivided into three non-overlapping segments **36, 36', 36"**, of which respectively one is associated with an appropriate blade

receptacle **18, 18', 18"** of one of the short clamp holders **16, 16', 16"** (see Fig. 4a, b and c). Of these, the center cutting segment **36** of the indexable cutting insert **20** located in blade receptacle **18** is for production of the valve seat ring **28** (Fig. 4a). It exhibits the smallest adjustment angle $\alpha$ of the three blades of approximately 22°. The cutting or blade segment **36'** in the indexable cutting insert **20'** ~~22'~~ is associated with blade receptacle **18'** and is exhibits an adjustment angle $\alpha'$ of 45° for producing the inlet bevel (Fig. 3b, 4b). The cutting or blade segment **36"** on the indexable cutting insert **20"** in blade receptacle **18"** exhibits an adjustment angle $\alpha"$ of 60° for producing the outlet bevel (Fig. 3c, 4c).

[00014] By the use of the same type of indexable cutting insert the indexable cutting inserts can in the case of wear also be exchanged between the short clamp holders **16, 16', 16"**, so that all three blade segments **36, 36', 36"** come into employment as the respective main cutting blade or edge **34** ~~45~~. Thereby the cutting blade costs attributable to wear are reduced to one third.

[00015] In Fig. 5a and b top views of two typical indexable cutting inserts **20** ~~20''', 20IV~~ with triangular and pentagonal circumference are shown, of which the main cutting edges are subdivided into three or, as the case may be, two cutting blade segments, indicated with reference numbers **3, 4** and **6**. The three ~~there~~ imprinted numbers indicate for example that the active main edge in the associated blade receptacle exhibits a defined adjustment angle for example 30°, 45° or 60°. The imprint upon the cutting blade simplifies manipulation during resetting. In particular, it can be seen with a single glance which of the characterized cutting edges is already worn and which is not. Thereby inadvertent adjustments can be avoided.